# **Solidity | Contracts**



Solidity's code is encapsulated in contracts which means a contract in Solidity is a collection of code (its functions) and data (its state) that resides at a specific address on the Ethereum blockchain. A contract is a fundamental block of building an application on Ethereum.

## POP vs OOP vs BOP

Sr.No.	Title	Short	Language	Details
1	Procedure	POP	C-Language	Functions and
	Oriented			Procedure
	Programming			
2	Object Oriented	OOP	CPP / Java /	Classes
	Programming		C# Languages	State & Functions
3	<b>Block Oriented</b>	BOP	Solidity	Contracts
	Programming		Language	State & Functions

## **Contract Declaration Flow:**

## Pragma:

Pragmas are instructions to the compiler on how to treat the code. All solidity source code should start with a "version pragma" which is a declaration of the version of the solidity compiler this code should use. This helps the code from being incompatible with the future versions of the compiler which may bring changes.

### **Contract:**

The contract keyword declares a contract under which the code is encapsulated.



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### State variables:

State variables are permanently stored in contract storage that is they are written in Ethereum Blockchain.

#### A function:

Functions are code blocks that perform specific tasks for different input parameters without repeating lines of code. The most common way to define a function in Solidity is by using the function keyword, followed by a unique function name, a list of parameters (that might be empty), and a statement block surrounded by curly braces.

### YouTube Link:



https://www.youtube.com/embed/5AmL611Kdl0

**Solidity Source File** 

{CODE}

Bibliography/References

https://spdx.dev/about/

